



JIM McDONNELL, SHERIFF

County of Los Angeles
Sheriff's Department Headquarters
4700 Ramona Boulevard
Monterey Park, California 91754-2169



A Tradition of Service

February 10, 2015

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
Los Angeles, California 90012

Dear Supervisors:

AUTHORIZE THE CHIEF INFORMATION OFFICER TO EXECUTE A WORK ORDER WITH IBM CORPORATION FOR IMPLEMENTATION SERVICES TO DEVELOP A MOBILE WEB APPLICATION FOR THE COUNTYWIDE WARRANT SYSTEM (ALL DISTRICTS) (3 VOTES)

**CIO RECOMMENDATION: APPROVE (X) APPROVE WITH MODIFICATION ()
DISAPPROVE ()**

SUBJECT

The Los Angeles County (County) Sheriff's Department (Department) is requesting to execute a Work Order (WO) with IBM Corporation (IBM) to develop a mobile web application as part of the Los Angeles Countywide Warrant System (CWS) three-phase modernization project.

IT IS RECOMMENDED THAT THE BOARD:

Authorize and instruct the County's Chief Information Officer (CIO), at the request of the Department, to execute a WO for services (Services) related to IBM software development and implementation for the CWS modernization project, under a Master Services Agreement Number 75869 (Agreement) with IBM for an amount not to exceed \$389,000.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

CWS has been operational since April 1988. It was designed to track and provide accurate warrant information to criminal justice agencies in a timely manner. CWS maintains information on persons for whom a felony, misdemeanor, or traffic warrant has been issued. It is a computerized information system designed for efficient and rapid retrieval of warrants and wanted persons information.

CWS is currently staffed by the Department's CWS Unit 24 hours a day, 7 days a week. Criminal justice agencies throughout the County rely on CWS for warrant information. The agencies include the Department, California Highway Patrol, over 40 municipal law enforcement agencies, the County's Superior Court, District Attorney's Office, and Probation Department.

The CWS database contains nearly two million active warrants. The accuracy and effectiveness of the system has a direct impact on public safety. The system impacts officer safety by providing vital warrant information and warnings on the individuals they encounter while on patrol.

Despite its prominent use by all law enforcement agencies, CWS is built upon technology that was mainstream in the 1980s and is no longer suitable for developing modern web-based applications. Changes and maintenance of CWS is expensive, slow, and limited to being performed by a shrinking number of Information Technology (IT) professionals who are proficient in legacy software languages. The CWS user screens are all non-graphical, text-based, monochrome displays.

This outdated technical architecture of CWS prevents much needed enhancements and poses a risk that CWS will become non-supportable in the future. Steps must be taken to begin the process of migrating the architecture to a current mobile web-based application.

The Productivity Investment Fund Grant (Grant) was awarded to the Department and the County's Information Systems Advisory Body (ISAB) to execute Phase 1 of the CWS modernization project to achieve the following productivity gains:

- Modern readable warrant screens on browser and mobile devices.
- Reduced training requirements.
- Streamlined warrant searches with higher match rates using advanced name search software.
- Digital images to provide additional identification tools.
- Identity and role-based authentication/authorization versus terminal based security.
- Improved warrant Services by Geocoded maps of existing open warrants by law enforcement reporting district.

The focus of the recommended WO is to procure the Services to develop the mobile web-based application portion of the overall project to provide a modern graphical user interface that can be deployed to desktop and mobile devices.

The Department expects the implementation of the CWS modernization project to provide strategic technical benefits to the County including:

- CWS will use a mobile web-based application development, deployment, and a management platform for an application that is used by over 40 external agencies.

- CWS will be the first criminal justice application to begin the process of building a master data management Service for the criminal justice enterprise using the Office of the CIO's software standard for entity resolution (for accurate and reliable client identification).

Implementation of Strategic Plan Goals

The recommended action is consistent with the principles of the County's Strategic Plan, Goal 1, Operational Effectiveness/Fiscal Sustainability. The implementation of the CWS mobile web-based application will directly contribute to achieving the County's Strategic Initiative 4; and Strategic Initiative 5, by developing IT solutions that achieve efficiencies that transform service delivery by replacing critical legacy systems.

FISCAL IMPACT/FINANCING

There is no net County cost. The Grant awarded for Phase 1 of this project is in the amount of \$950,000. The cost for IBM Services to develop the mobile web-based application component from IBM is \$389,000 and will be funded from the Grant to the Department and the County's ISAB.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The recommended WO will be utilized under the Agreement which enables County departments to utilize the professional Services of IBM to support customization and implementation of the IBM suite of products. The Agreement offers a structure for acquiring needed Services through a streamlined acquisition process that is standard across the entire enterprise.

IBM cooperated with the Department to negotiate the WO, which is comprehensive and provides cost savings to the County. The CIO has reviewed and concurs with the WO (see attached CIO Analysis).

The WO and Agreement have been reviewed and approved by County Counsel.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The implementation of a CWS mobile web-based application, incorporating digital images, a commercial name search product, and a graphical user interface using current technology software products and tools, will provide enhanced capabilities for all CWS users.

Replacement of outdated programs and databases will mitigate the risk of CWS becoming non-supportable over the next five years. The ongoing cost of programming resources will be lower due to greater availability of industry vendors utilizing web-based software development tools. The dwindling population of software programmers using mainframe technologies as their core competence will also be addressed through the three phase modernization project.

CONCLUSION

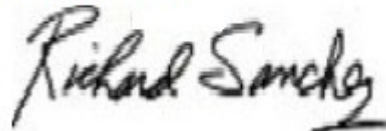
Upon Board Approval, it is requested that the Executive-Clerk of the Board return two adopted copies of this Board letter to the Department's Technology and Support Division.

Sincerely,

A handwritten signature in black ink, appearing to read "Jim McDonnell". The signature is stylized with a large, looping initial "J" and "M".

JIM McDONNELL
Sheriff

Reviewed by:

A handwritten signature in black ink, appearing to read "Richard Sanchez". The signature is written in a cursive style with a prominent "R" and "S".

RICHARD SANCHEZ
Chief Information Officer

JM:RJD:rd
Enclosures



RICHARD SANCHEZ
CHIEF INFORMATION OFFICER

Office of the CIO CIO Analysis

NUMBER: CA 15-02	DATE: 1/21/15
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SUBJECT:

**AUTHORIZE THE CHIEF INFORMATION OFFICER TO EXECUTE A
WORK ORDER WITH IBM CORPORATION FOR IMPLEMENTATION
SERVICES TO DEVELOP A MOBILE WEB APPLICATION FOR THE
COUNTYWIDE WARRANT SYSTEM**

RECOMMENDATION:

☒ Approve ☐ Approve with Modification ☐ Disapprove

CONTRACT TYPE:

☐ New Contract ☐ Sole Source
☐ Amendment to Contract #: ☒ Other: Work Order – MSA #75869

CONTRACT COMPONENTS:

☐ Software ☐ Hardware
☐ Telecommunications ☒ Professional Services

SUMMARY:

Department Executive Sponsor: Jim McDonnell, Sheriff

Description: The Sheriff (Department) is requesting Board authorization to execute a Work Order under the Master Services Agreement No. 75869 (MSA) with IBM Corporation (IBM) to establish a mobile development platform and develop a web application as part of the Countywide Warrant System (CWS) modernization project. Cost of this Work Order is \$389,000 funded by a Productivity Investment Fund (PIF) Grant to the Sheriff and Information Systems Advisory Body (ISAB).

Contract Amount: **\$389,000**

Funding Source: **Productivity Investment Fund
(PIF) Grant**

☐ Legislative or Regulatory Mandate ☒ Subvened/Grant Funded: **PIF Grant**

Strategic and Business Analysis

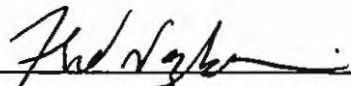

PROJECT GOALS AND OBJECTIVES:

The Work Order under the MSA will provide professional services for the development and implementation of a mobile development platform and a mobile web application as part of a modernization project for the Los Angeles Countywide Warrant System (CWS).

BUSINESS DRIVERS:

CWS is an automated repository for Warrants and Wanted-Persons Information issued within the County of Los Angeles. CWS has been in use since 1988. It executes on a mainframe system and was developed using IMS/COBOL (Information Management System/COMmon Business Oriented Language) / Assembler technology stack. The

	<p>system does not have the capability to provide features, such as photo display, location awareness, and modern user interface components. CWS has become increasingly difficult to maintain or implement changes because of a lack of resources knowledgeable in the development language.</p> <p>To address the CWS modernization a PIF Grant in the amount of \$950,000 was awarded to the Sheriff's Department and ISAB to execute Phase 1 of the Project. A subset (\$389,000) of the grant funds will be used to develop these web services.</p>
	<p>PROJECT ORGANIZATION:</p> <p>The Sheriff's CWS Unit and ISAB will be driving this Project with a Lieutenant assigned as the Business Project Manager and an Information Technology Specialist II as the Technical Project Manager, who will be managing the ongoing development and operation of this Project.</p>
	<p>PERFORMANCE METRICS:</p> <p>IBM will develop the mobile application and deliver the following services:</p> <ul style="list-style-type: none"> • Architecture Design Walkthrough; • Phase 1 Application and Worklight Adapter Code; • Application Design Walkthrough; • Phase 2 Application and Worklight Adapter Code; and • Phase 2 Functional Testing Assistance.
	<p>STRATEGIC AND BUSINESS ALIGNMENT:</p> <p>The proposed Work Order supports the departments and County strategy to modernize its legacy applications.</p>
	<p>PROJECT APPROACH:</p> <p>The overarching project goal is to modernize the existing CWS and to enhance its capabilities with the development of a new mobile enabled interface for officers in the field. The mobile feature will provide officers a better information display, photos for identification verification purposes, and enhanced integration capability to incorporate external Department of Justice and other local information resources.</p> <p>The mobile development platform will enable future enhancements and revisions to be developed and deployed on mobile devices.</p>
	<p>ALTERNATIVES ANALYZED:</p> <p>Currently, there are no Commercial off-the-shelf (COTS) applications available in the market that perform the functions of CWS and that meet the needs of the Department.</p>

Technical Analysis	<p>ANALYSIS OF PROPOSED IT SOLUTION:</p> <p>There are three implementation Phases for this project with the initial phase (Phase I) described below.</p> <p>Phase 1: Replicate the non-relational IMS database to a relational Database 2 (DB2), develop a new web-browser interface to access the Warrants, integrate a new name search commercial product (to replace the existing Assembler name routines), call existing CWS update and interface transactions, and incorporate photos into the Warrant display as retrieved from the County Mugshot System.</p> <p>Phases 2 and 3 are listed for informational purpose as these will be addressed in the future.</p> <p>Phase 2: Replace the existing custom coded Assembler interface programs with a general purpose vendor supported by Integration Broker software suite.</p> <p>Phase 3: Convert the remaining IMS/COBOL update programs to the Phase 1 CWS web-browser version running on DB2.</p>
Financial Analysis	<p>BUDGET:</p> <p>Total Work Order cost:.....\$389,000</p>
Risk Analysis	<p>RISK MITIGATION:</p> <ol style="list-style-type: none"> 1. There are minimal risks to the proposed implementation. It does not affect the production system and this is an extension of the application. 2. The Chief Information Security Officer (CISO) reviewed the Work Order and did not identify any IT security or privacy related issues.
CIO Approval	<p>PREPARED BY:</p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  Fred Nazarbegan, Sr. Associate Chief Information Officer </div> <div style="text-align: center;"> <u>1-29-15</u> Date </div> </div> <p>APPROVED:</p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  Richard Sanchez, County Chief Information Officer </div> <div style="text-align: center;"> <u>1-29-15</u> Date </div> </div>

Please contact the Office of the CIO (213.253.5600 or info@cio.lacounty.gov) for questions concerning this CIO Analysis. This document is also available online at <http://ciointernet.lacounty.gov/>